REMARKS

Claims 1-16 are pending in the present application. Claim 2 is amended. Claims 1, 2, 5, 6, 9, 10, 13, and 14 are independent claims.

In view of the following remarks, the Examiner is respectfully requested to reconsider the outstanding rejection.

Allowable Subject Matter

Applicants acknowledge the Examiner's indication that claims 3, 4, 7, 8, 11, 12, 15, and 16 would be allowable if rewritten in independent form.

Claim Objection

The Examiner objected to claims 2 and 4 because the word --which-- should be inserted before "no data" in line 15 of claim 2. Applicants have amended claim 2 as suggested by the Examiner. Thus, this objection should be withdrawn.

Rejection Under 35 U.S.C. § 102

Claims 1, 2, 5, 6, 9, 10, 13, and 14 stand rejected under 35 USC § 102(b) as being anticipated by U.S. Patent No. 6,480,475 to Modlin et al. (hereafter "Modlin"). This rejection is respectfully traversed.

Independent claims 1, 2, 9, and 10 recite using a time-division half-duplex communication function, in which bits of data obtained according to a uniform data rate are assigned such that the data bits uniformly obtained during a given period is transmitted during the data transmission time of one period, or the data transmission and quasi-data transmission times of one period.

Furthermore, independent claims 5, 6, 13, and 14 recite using a time-division half-duplex communication function, in which data bits are reproduced according to uniform data rate such that all the bits reproduced during a given period are reproduced from data that was assigned to the data transmission time of one period, or assigned to the data transmission and quasi-data transmission times of one period.

In the Response to Arguments (Office Action at page 7), the Examiner states the following:

> "The Examiner disagrees because the added limitation: 'a uniform data rate' is taught by Modlin in col. 6, lines 4-13. In col. 6, lines 4-13, Modlin teaches of [*sic*] constant symbol rate that is equivalent to uniform data rate. Note that constant (uniform) data rate, variable data rate, or other types of data rates are all well known in the art."

Thus, it is clear that the Examiner is attempting to rely on col. 6, lines 4-13 in combination with other passages describing Modlin's invention. Applicants submit that this is improper for reasons discussed below.

Modlin's Invention

Modlin teaches (e.g., in column 6, lines 49-52) that its invention relates to a time-division duplexing (TDD) system. Specifically, Modlin is concerned with a specific type of problem that occurs in data transmission systems utilizing a superframe structure and time division duplexing (TDD) (see, e.g., col. 6, lines 42-45; col. 8, lines 45-48). Modlin describes this problem in col. 6, lines 18-27:

> "...there is an undesired time delay associated with the reception of a particular codeward that crosses a superframe boundary because of the predetermined time gap until the next transmission period due to the alternating transmissions and receptions of data in a TDD system. **Such a problem is not present in ADSL since ADSL relies on frequency division duplexing (FDD) or echo canceling** to provide the separation between upstream and

> downstream transmissions (as opposed to time division duplexing (TDD))." (Emphasis added.)

Modlin's invention solves this problem by preventing each codeword from crossing the boundaries of superframes (see col. 8, lines 48-55). Thus, it is clear that Modlin's invention only involves TDD data transmission systems.

It is clear that the Examiner is relying on the teachings regarding Modlin's invention, i.e., Modlin's TDD data transmission system, in the present rejection. See Office Action at page 3, citing Figs. 3-4 and cols. 8-12 of Modlin.

Examiner Attempts to Combine Different Inventions

However, in the Response to Arguments, the Examiner cites a passage (col. 6, lines 4-13) from Modlin's **Background of the Invention** to provide a teaching of a constant symbol rate. Specifically, col. 6, lines 4-13, discloses the following:

> "In **ADSL and previously proposed VDSL data communication systems**, there is a constant symbol rate which in turn translates to the fact that a user can choose any data rate in multiples of 32 k bits/seconds (kbps). Accordingly, there is a need for improvements with VDSL data communication systems so that the user data rate is granular (i.e., as granular as ADSL) but does not depend on internal system issues like the size of the superframe or the number of downstream frames in a superframe." (Emphasis added.)

Accordingly, this passage is not describing Modlin's invention. In fact, this passage does not even relate to TDD-based systems. Instead, this passage discusses **different types of systems**, i.e., ADSL and other types of VDSL systems. In fact, col. 6, lines 18-27 (quoted above) clearly discloses that systems like ADSL do not experience the types of delays that Modlin's invention is designed to prevent.

Accordingly, Applicants respectfully submit that the Examiner's rejection attempts to impermissibly combine the teachings of incompatible communication systems in order to reject the

claims. Accordingly, it is respectfully submitted that the Examiner's rejection is not sanctioned by 35 U.S.C. § 102 and, thus, should be withdrawn.

At least for the reasons set forth above, Applicants respectfully submit that claims 1, 2, 5, 6, 9, 10, 13, and 14 are allowable. Accordingly, the Examiner is respectfully requested to reconsider and withdraw this rejection.

Conclusion

Should the Examiner believe that any outstanding matters remain in the present application, the Examiner is respectfully requested to contact Jason W. Rhodes (Reg. No. 47,305) at the telephone number of the undersigned to discuss the present application in an effort to expedite prosecution.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

By _____

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